



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: JT8D-7 series
 UNIQUE ID NUMBER: 8PW085
 COMBUSTOR: Reduced emissions
 ENGINE TYPE: MTF

BYPASS RATIO: 1.1
 PRESSURE RATIO (π_{oo}): 15.8
 RATED THRUST (F_{oo}) (kN): 62.3

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{oo} (g/kN) or SN	17.2	58.0	57.5	11.1
AS % OF ORIGINAL LIMIT	87.6	49.1	80.3	41.3
AS % OF CAEP/2 LIMIT (NO _x)			100.3	
AS % OF CAEP/4 LIMIT (NO _x)			115.1	
AS % OF CAEP/6 LIMIT (NO _x)			122.7	
AS % OF CAEP/8 LIMIT (NO _x)			141.7	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

- NEWLY MANUFACTURED ENGINES
 x DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F _{oo})	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	0.989	0.25	0.90	17.20	9.5
CLIMB OUT	85	2.2	0.811	0.25	1.10	14.00	
APPROACH	30	4.0	0.286	0.40	2.20	6.30	
IDLE	7	26.0	0.129	3.80	14.30	3.15	
LTO TOTAL FUEL (kg) or EMISSIONS (g)			419	830	3186	3281	-
NUMBER OF ENGINES				2	2	2	2
NUMBER OF TESTS				7	7	4	4
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)				13.2	50.9	52.3	9.5
SIGMA (D _p /F _{oo} in g/kN, or SN)							
RANGE (D _p /F _{oo} in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	
TEMPERATURE (K)	270-311
ABS HUMIDITY (kg/kg)	

FUEL

SPEC	Jet A
H/C	
AROM (%)	

MANUFACTURER: Pratt & Whitney
 TEST ORGANIZATION: P&WA
 TEST LOCATION: East Hartford, CT
 TEST DATES: 26/02/1980-18/06/1980

REMARKS

1. Reduced emissions combustor.
2. Applicable to JT8D-7, -7A, -7B.
3. Factor used for calculation of D_p/F_{oo} CO [1PW005] was based on number of tests not engines.
4. Corrected in version15

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)